18448

SOUNDINGS IN FATHOMS

UNITED STATES - W
WASHINGT

PUGET SO
SOUTHERN

Mercator Projection
Scale 1:80,000 at Lat 47°
North American Datum of
(World Geodetic System

SOUNDINGS IN FA
AT MEAN LOWER LOW

AIDS TO NAVIGATION
Contact U.S. Coast Guard Light List for
information concerning aids to navigation

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service stations listed below, primarily commercial marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Seattle Wa	KHB-60	162.55 MHz
Olympia Wa	WXM-62	162.475 MHz

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 toll free, or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CABLE AREAS
See the larger scale charts for the cable areas within these limits. They are not all shown on this chart.

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 3° from the normal variation have been observed along Henderson Inlet.

Chart 18456
1:20,000

Nautical Miles
Yards

24th Ed. Sept 22/90 ■
18448

CAUTION
This chart has been corrected from the Notice to Mariners published

This nautical chart has been designed to promote safe navigation. The

WARNING

30th Anniversary 1970-1990

Formerly C&GS 6460, 1st Ed., June 1951. C 1921-214

UNITED STATES - WEST COAST
WASHINGTON
PUGET SOUND
SOUTHERN PART

Mercator Projection
Scale 1:80,000 at Lat. 47°19'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
◎(Accurate location) ○(Approximate location)

HEIGHTS
Heights in feet

AUTHORITIES
Hydrography and topography by the National Ocean Service, Charting and Geodetic Services with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Departments of the Navy.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.644" southward and 4.447" westward to agree with this chart.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

TIDAL INFORMATION

Name	Position (Lat/Long)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Seattle	(47°36'N/122°20'W)	11.4	10.8	2.6	-0.3
Bremerton	(47°33'N/122°38'W)	11.7	10.8	2.6	-0.3
Tacoma	(47°17'N/122°25'W)	11.8	10.9	2.6	-0.3
Steilacoom	(47°10'N/122°36'W)	12.1	11.2	2.7	-0.3
Olympia	(47°02'N/122°54'W)	14.4	13.5	3.2	-0.4
Shelton	(47°13'N/123°05'W)	14.2	13.2	3.5	-0.5
Union	(47°21'N/123°06'W)	13.8	12.8	3.3	-0.5

(1988)

ABBREVIATIONS (For complete list of Symbols and Abbreviations see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):
AERO (aeronautical), Al (alternating), B (black), Bn (beacon), C (can), DIA (diaphone), F (fixed), Fl (flashing), G (green), Gp (group), H24 (continuous), Ho (hour), Iso (isophase), LFl (long flash), M (nautical mile), MICRO TR (microwave tower), Mo (morse code), Oc (occulting), Q (quick), R (red), Ra Refl (radar reflector), VQ (very quick), W (white), WHIS (whistle), Y (yellow)

Bottom characteristics:
Blds (boulders), bk (broken), Co (coral), cy (clay), G (gravel), gy (gray), grs (grass), h (hard), M (mud), Oys (oysters), Rk (rock), S (sand), sft (soft), Sh (shells), sy (silty)

Miscellaneous:
AUTH (authorized), Obstn (obstruction), PD (position doubtful), Subm (submerged), ED (existence doubtful), PA (position approximate), Rep (reported), Wk (wreck, rock, obstruction, or shoal swept over to the depth indicated)
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Wash., or at the Office of the District Engineer, Corps of Engineers in Seattle, Wash.
Refer to charted regulation section numbers.

NOTE B
Mariners are cautioned that the Washington State Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards or other emergency conditions.

RESTRICTED AREA 2
334.1240 (see note A)

RESTRICTED AREA 1
334.1240 (see note A)

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 3° from the normal variation have been observed along Henderson Inlet.

COLREGS, 80.1395 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service stations listed below provide continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Seattle, Wa.	KHB-60	162.55 MHz
Olympia, Wa.	WXM-62	162.475 MHz

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CABLE AREAS
See the larger scale charts for the cable areas within their limits. They are not all shown on this chart.

Nautical Miles
Yards

Chart 18476
1:40,000

Chart 18456
1:20,000

122° 30'

...rt has been designed to promote safe navigation. The ...vice encourages users to submit corrections, additions, or ...ving this chart to the Director, Charting and Geodetic ...National Ocean Service, NOAA, Rockville, Maryland 20852.

WARNING
This prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

20th Anniversary 1970-1990
National Oceanic and Atmospheric Administration
"Serving The Nation"

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

(Puget Sound, Southern Part)
SOUNDINGS IN FATHOMS - SCALE 1:80,000

18448